

CLAIMS AMENDMENTS

1. (currently amended) Method for producing a tubular workpiece, especially a shock absorber piston rod, wherein starting out from a tubular initial workpiece (3), comprising:

first processing steps of:

reducing a first area (3a) of the initial workpiece (3) ~~is reduced in a first step~~ by a radial forming process for reducing ~~it's the~~ outer diameter of the workpiece,

forming ~~and a~~ transition area (3e), extending at an angle relative to the longitudinal axis (A) of the tubular initial workpiece (3), ~~is formed,~~ said transition area (3e) extending between said first area (3a) of the initial workpiece (3) having the reduced diameter and a non-reduced second area (3b) following the transition area (3e), ~~characterized in that a second process step, following the first process step,~~

a second process step of:

cold forming the transition area (3e) of the initial workpiece (3) ~~is cold formed~~ to obtain the a substantially rectangular (2) shoulder of the workpiece ~~(1).~~

~~The method as defined in Claim 1, chracterized in that radial forming of the first area (3c) is effected by rotary swaging.~~

2. (currently amended) The method as defined in Claim 1 ~~11~~, ~~characterized in that~~ wherein the orbital forming process of the second process step is an orbital forging or axial pressing process.
3. (currently amended) The method as defined in Claim 3 ~~2~~, ~~characterized in that~~ wherein the orbital forging process is effected by at least one of circular movement and a tilting movement.
4. (currently amended) Workpiece with a substantially rectangular shoulder (2), ~~characterized in that~~ comprising:

an intial workpiece haing a wall and a shoulder wherein the shoulder (2) is an integral part of the wall of the initial workpiece (3) and that the shoulder (2) is produced by cold forming the initial workpiece (3) by a radial forming process, followed by an orbital forging or axial pressing process.

5. Device for producing a tubular workpiece with a substantially rectangular shoulder ~~(2)~~, ~~characterized in that the device (10) comprises~~ comprising:
a reducing unit ~~(11)~~, ~~by means of which~~ adapted to form a transition area ~~(3e)~~
in the form of a circumferential inclined surface can be formed in a tubular initial workpiece ~~(3)~~, and
a forming unit ~~(15)~~ ~~by means of which~~ adapted to convert the inclined transition area ~~(3e)~~ ~~can be converted~~ to a substantially rectangular shoulder ~~(2)~~ of the workpiece ~~(1)~~ by cold forming of the initial workpiece ~~(3)~~.
6. (currently amended) The device as claimed in Claim 6 5, ~~characterized in that~~
wherein the reducing unit ~~(11)~~ of the device ~~(10)~~ comprises at least one forging die ~~(12)~~.
7. (currently amended) The device as claimed in Claim 7 6, ~~characterized in that~~
wherein the at least one forging die comprises an inclined forming surface ~~(13)~~.
8. (currently amended) The device as claimed in Claim 6 5, ~~characterized in that~~
wherein the forming unit ~~(15)~~ of the device ~~(10)~~ is ~~designed as an~~ orbital forming unit.
9. (currently amended) The device as claimed in Claim 6 5, ~~characterized in that~~
wherein the forming unit ~~(15)~~ comprises an orbital tool ~~(16)~~ that performs an orbital movement about a longitudinal axis ~~(A)~~ of the initial workpiece ~~(3)~~.
10. (currently amended) The method as defined in Claim 1, ~~characterized in that~~
wherein radial forming of the first area ~~(3e)~~ is effected by rotary swaging.
11. (New) The method as defined in Claim 1, wherein the cold-forming process of the second process step is an orbital forming process.